## SEP 17 2008

### 510(k) Summary

# Astra Tech AB OsseoSpeed™ Profile, A component of the Astra Tech Implant System

#### ADMINISTRATIVE INFORMATION

Manufacturer Name:

Astra Tech AB

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#### DEVICE NAME AND CLASSIFICATION

Trade/Proprietary Name:

OsseoSpeed<sup>TM</sup> Profile System

Common Name:

dental implant

Classification Regulations:

Implant, Endosseous, Root Form,

Class II, 21CFR 872.3640: 21 CFR 872.3630

Product Code:

DZE; NHA

Classification Panel:

**Dental Products Panel** 

Reviewing Branch:

**Dental Devices Branch** 

#### INTENDED USE

OsseoSpeed<sup>TM</sup> Profile is intended to be used to replace missing masticatory functional units (teeth) in single or multiple unit applications within the mandible or maxilla. The device may be used equally well in a single-stage or two-stage surgical procedure. It is indicated for immediate implantation in extraction sites or implantation in partially healed or completely healed alveolar ridge situations. When a one-stage surgical approach is applied, the implant may be immediately loaded when good primary stability is achieved and the functional load is appropriate.

The fluoride-modified surface, though having a fluoride ion level far below that needed for caries prevention in teeth, provides a favorable substrate for bone attachment and osseointegration. OsseoSpeed Profile is especially indicated for use in soft bone applications where implants with other implant surface treatments may be less effective. Because initial stability may be difficult to obtain in Type IV bone, immediate loading of single tooth restorations may not be appropriate in such situations.

#### **DEVICE DESCRIPTION**

The OsseoSpeed™ Profile is a self-tapping, threaded, root-formed dental implant, intended for supporting prosthetic devices in edentulous or partially edentulous patients to restore esthetics and chewing function. It is made from titanium with a microroughened and fluoride-modified surface, designated OsseoSpeed. It includes a contoured coronal margin that mimics the contour of alveolar bone and is designed to create a more desirable esthetic effect.

#### **EQUIVALENCE TO MARKETED DEVICE**

Astra Tech AB demonstrated that, for the purposes of FDA's regulation of medical devices, the OsseoSpeed<sup>TM</sup> Profile is substantially equivalent in indications and design principals to the predicate devices, each of which has been determined by FDA to be substantially equivalent to preamendment devices.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

## SEP 17 2008

Astra Tech AB C/O Linda K. Schulz Regulatory Affairs PaxMed International, LLC 11234 El Camino Real, Suite 200 San Diego, California 92130

Re: K080156

Trade/Device Name: OsseoSpeed™ Profile System

Regulation Number: 21 CFR 872.3640

Regulation Name: Endosseous Dental Implant

Regulatory Class: II

Product Code: DZE, NHA Dated: September 5, 2008 Received: September 8, 2008

#### Dear Ms. Schulz:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at 240-276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at 240-276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Chiu S. Lin, Ph. D

**Division Director** 

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

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Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

510(k) Premarket Notification

 $OsseoSpeed^{TM}\ Profile$ 

## **Indications for Use**

510(k) Number (if known): K080156
Device Name: OsseoSpeed <sup>TM</sup> Profile System
Indications for Use:
OsseoSpeed <sup>TM</sup> Profile is intended to be used to replace missing masticatory functional units (teeth) in single or multiple unit applications within the mandible or maxilla. The device may be used equally well in a single-stage or two-stage surgical procedure. It is indicated for immediate implantation in extraction sites or implantation in partially healed or completely healed alveolar ridge situations. When a one-stage surgical approach is applied, the implant may be immediately loaded when good primary stability is achieved and the functional load is appropriate.
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Prescription Use X (Part 21 CFR 801 Subpart D)  AND/OR Over-The-Counter Use (21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
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510(k) Number: \_\_\_